

Title (en)
VIDEO ENCODING METHOD AND DEVICE

Title (de)
VIDEOCODIERUNGSVERFAHREN UND EINRICHTUNG

Title (fr)
PROCEDE ET DISPOSITIF DE CODAGE VIDEO

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Application
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Abstract (en)
[origin: WO03055224A1] The invention relates to an encoding method for the compression of a video sequence divided into groups of frames (GOFs), each of which is decomposed by means of a three-dimensional (3D) wavelet transform comprising successively, at each decomposition level, a motion compensation step, a temporal filtering step, and a spatial decomposition step. The motion compensation is based on a motion estimation leading to motion vectors which are encoded and put in the coded bitstream together with, and just before, the coded texture information of the concerned spatial decomposition level. The encoding operation of the motion vectors is carried out at the lowest spatial resolution, and only refinement bits of said motion vectors at each of the other spatial resolutions are put in the coded bitstream refinement bitplane by refinement bitplane. Specific markers are introduced in the coded bitstream for indicating the end of the bitplanes, the temporal decomposition levels and the spatial decomposition levels respectively. According to the present invention, for each temporal decomposition level, additional specific markers are then introduced in the coded bitstream, for indicating in each spatial decomposition level the end of the motion vector information related to said spatial decomposition level. This solution allows, in case of very low decoding bitrate, to skip the residual motion information and to decode only the texture information, or, in another implementation, to skip said residual motion information and also the remaining spatial levels of the concerned temporal level.

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